



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,267	04/20/2004	Gidon Elazar	SNDK.428US1	2409
66785	7590	06/18/2007	DAVIS WRIGHT TREMAINE LLP - SANDISK CORPORATION 505 MONTGOMERY STREET SUITE 800 SAN FRANCISCO, CA 94111	
			EXAMINER	
			DAY, HERNG DER	
		ART UNIT	PAPER NUMBER	
		2128		
		MAIL DATE	DELIVERY MODE	
		06/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/827,267	ELAZAR ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Herng-der Day	2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 March 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 and 22-54 is/are pending in the application.
  - 4a) Of the above claim(s) 32-54 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-20 and 22-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>4/17/07</u>	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

1. This communication is in response to Applicants' response ("response") to Office Action dated November 16, 2006, filed March 16, 2007.

1-1. Claims 1 and 20 have been amended. Claim 21 has been canceled. Claims 22-54 have been added. Claims 1-20 and 22-54 are pending.

1-2. Newly submitted claims 32-54 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions I (Claims 1-20 and 22-31, drawn to web server emulation device and web server emulation system, classified in class 703, subclass 23) and II (Claims 32-54, drawn to methods of serving web content and sending data through a digital appliance, classified in class 709, subclass 219) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case the process as claimed can be practiced with another materially different product such as a workstation or a personal computer and the product as claimed can be used in a materially different process such as storing permanent data.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 32-54 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Art Unit: 2128

**1-3.** Claims 1-20 and 22-31 have been examined and rejected.

***Claim Rejections - 35 USC § 102***

**2.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**3.** Claims 1-3, 12, 18-20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Debbling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001.

**3-1.** Regarding claim 1, Debbling discloses a web server emulation device for serving web content, the web server emulation device adapted to be coupled to a digital appliance for end use of at least part of the web content, the web server emulation device comprising:

one or more non-volatile storages for storing at least part of the web content (The on-chip memory circuitry 721 may comprise flash-memory, column 5, lines 20-32);

one or more interfaces, coupled to at least one of the nonvolatile storages, the one or more interfaces for receiving and sending at least part of the web content (an on-chip Ethernet interface 740, column 5, lines 20-32), and

one or more agents for preparing web content to be served the digital appliance (using embedded web server processes, column 5, lines 41-43),

Art Unit: 2128

wherein at least part of the web content is served the digital appliance (a host computer system 800, column 5, lines 20-32) for end use of the web content (information processed by the embedded web server process is web content).

**3-2.** Regarding claim 2, Debling further discloses wherein the web server emulation device is coupled to the digital appliance (a host computer system 800, column 5, lines 20-32).

**3-3.** Regarding claim 3, Debling further discloses wherein the digital appliance is a computer (a host computer system 800, column 5, lines 20-32).

**3-4.** Regarding claim 12, Debling further discloses wherein the web server emulation device couples to the digital appliance via a physical connection to the digital appliance (The Ethernet port 750 connects to the host via a direct link 751, column 5, lines 20-32).

**3-5.** Regarding claim 18, Debling further discloses wherein said one or more agents prepare web content to be served by using information received from the coupled digital appliance (move certain selected processes from the host onto the on-chip processing circuitry 720, column 5, lines 41-53).

**3-6.** Regarding claim 19, Debling further discloses wherein said one or more agents obtain web content from a remote server (Use of the telephone line port enables Internet connection, column 5, lines 61-67).

**3-7.** Regarding claim 20, the system claim includes equivalent method limitations as in claim 1 and is anticipated using the same analysis of claim 1.

**3-8.** Regarding claim 22, Debling further discloses wherein the digital appliance comprises:  
a interface whereby the web server emulation device can be coupled to the digital  
appliance (port 850, FIG. 3); and

Art Unit: 2128

middleware by which the digital appliance dispatches request to, and gathers responses from, one or more of said agents by said interface whereby the web server emulation device can be coupled to the digital appliance (a proxy process on the host, column 4, lines 31-40).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of Applicants' admission.

5-1. Regarding claims 4 and 5, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose wherein the digital appliance is a personal digital assistant or a mobile phone.

Applicants assert in the specification at page 2, line 20 through page 3, line 2, "Web pages may be displayed on a client computing device (hereafter Client Digital Appliance) such as PC, laptops, PDA, mobile phone and any other computational device that can connect to the Internet." In other words, a personal digital assistant or a mobile phone may be used to display web pages.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the

Art Unit: 2128

invention as specified in claims 4 and 5 because using a personal digital assistant or a mobile phone to display web pages would provide improved mobility for a user than using a host computer system.

**5-2.** Regarding claims 6-11, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose wherein the web content is a web page, streamed content, an electronic book, a document, an HTML form, or a multimedia file.

Applicants assert in the specification at page 3, lines 12-21, "The content sent to the browser can be of several types and formats. It can be static, such as a text file or an image file; HTML (Hyper Text Markup Language) is frequently used to describe static information on a web page. Other types can be streamed data, such as video and audio, which are transmitted as a stream composed of chunks of information, then processed and rendered as received. Another type of information can be a file such as text, video, audio, games, programs, Java applets, or ActiveX controls, all of which may be downloaded from web server to client. Still another format can be user-input dependant and is determined by information sent from client to server, for example a "search" command requested by the client triggers a process in the server to dynamically produce the information to be rendered."

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the invention as specified in claims 6-11 because web content can be of several types and formats in a client/server environment would provide more options to meet a user's requirement.

**5-3.** Regarding claim 17, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose the one or more non volatile storages further

Art Unit: 2128

comprising a hidden-from-user storage area used to store at least part of the web content, wherein said one or more agents control access to the hidden-from-user storage area.

Applicants assert in the specification at page 6, lines 9-11, "In a true online client/server scenario, part of the data and programs on the server are not accessible by the client." In other words, a hidden-from-user storage area is used to store at least part of the web content.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate Applicants' admission to obtain the invention as specified in claim 17 because with a hidden-from-user storage area would improve the security and privacy.

6. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of Official Notice.

6-1. Regarding claims 13-16, Debling discloses a web server emulation device in claim 1. Specifically, Debling discloses a direct link 751 to connect the host and the Ethernet port 750 of the communication device 700.

Debling fails to expressly disclose wherein the physical connection includes one or more cables and wherein the web server emulation device couples to the digital appliance by directly physically, remotely, or wirelessly connecting to the digital appliance.

"Official Notice" is taken that both the concept and the advantages of using the various connections for establishing the coupling between the web server emulation device and the digital appliance to meet specific requirement are well known and expected in the art. For

Art Unit: 2128

example, when the web server emulation device and the digital appliance are located at different cities, it is well known and expected that a physically direct connection is impossible.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the direct link 751 of Debling with one of the well known connections to meet specific requirement.

7. Claims 23-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of Bowman-Amuah, U.S. Patent 6,742,015 B1 issued May 25, 2004, and filed August 31, 1999.

7-1. Regarding claims 23-29, Debling discloses a web server emulation system in claim 22.

Debling fails to expressly disclose the various functions of a middleware and how the middleware can be identified.

Bowman-Amuah discloses at columns 56 and 57, "There is a definite functionality overlap between communications middleware and several other middleware components such as transaction services and information access", "Communications middleware can translate data into a format that is compatible with the receiving process", "Communications middleware can provide additional communications services that may be required by the applications", "The simplified interface associated with communications middleware can help to reduce the complexity of developing Netcentric applications", and "Communication middleware allows the client application to access any service on any physical server in the network without needing to know where it is physically located". In other words, because the middleware, e.g., communications middleware, allows the client application to access any service on any physical

Art Unit: 2128

server in the network without needing to know where it is physically located, identifying the middleware by specific address or port as a network node is necessary and obvious.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Bowman-Amuah to obtain the invention as specified in claims 23-29 because the above-mentioned various functions cannot be provided if the middleware cannot be identified and located.

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of Yang, U.S. Patent 6,733,329 B2 issued May 11, 2004, and filed August 21, 2002.

8-1. Regarding claim 30, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose wherein the web server emulation device is a USB flash drive portable storage device. Nevertheless, Debling discloses the on-chip memory circuitry 721 may comprise flash-memory (column 5, lines 20-32) for storage need.

Yang disclose a USB flash drive with built-in controller and flash memory currently has max. 1 gigabyte storage capacity (column 1, lines 17-25). A USB flash drive is a multifunctional device to enlarge the application scope of the mobile storage device (column 1, lines 54-56). Furthermore, a USB flash drive utilizes a detachable interconnector to reach a smooth data transfer between USB interfaces of different specifications (column 1, lines 57-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Yang to obtain the invention as specified in claim 30 because a USB flash drive may enlarge the application scope

Art Unit: 2128

of the mobile storage device and reach a smooth data transfer between USB interfaces of different specifications.

9. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Debling, U.S. Patent 7,031,903 B2 issued April 18, 2006, and filed October 16, 2001, in view of Kuo, U.S. Patent Application Publication No. 2003/0185083 A1 published October 2, 2003, and filed March 27, 2002.

9-1. Regarding claim 31, Debling discloses a web server emulation device in claim 1.

Debling fails to expressly disclose wherein the web server emulation device is a memory card type portable storage device. Nevertheless, Debling discloses the on-chip memory circuitry 721 may comprise flash-memory (column 5, lines 20-32) for storage need.

Kuo discloses, “Flash memory is ideal for dozens of portable applications. It is more flexible than a floppy and is faster than a hard drive. A flash storage is more rugged, which is able to tolerate severe shock and vibration without losing data. A flash storage card is also designed with solid state components, which save power and consume less energy” (column 1, paragraph [0004]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Debling to incorporate the teachings of Kuo to obtain the invention as specified in claim 31 because a flash storage card may save power and consume less energy.

#### *Applicants' Arguments*

10. Applicants' argue the following:

Art Unit: 2128

(1) "In contrast, the invention being claimed in claims 1 and 20 s for a device that can store and provide web content to a digital appliance, something which is not found Debling. Debling neither teaches nor suggests the serving, to a digital of appliance, of web content from a non-volatile memory of the device itself." (page 12, paragraph 3, Response.)

(2) "With respect to the "more non-volatile storages for storing at least part of the web content", the Office Action Cites the "on-chip memory circuitry 721" of Debling; however, neither in this memory nor elsewhere does Debling disclose the storing of web content on the device 700." (page 13, paragraph 2, Response.)

(3) "With respect to the "agents for preparing web content to be served the digital appliance", the Office Action cites Debling at column 5, lines 41-43; however, this just discloses the "on-chip processing circuitry 720 operates using embedded web server processes", but this is for the use on data that does not originate." (page 13, paragraph 3, Response.)

(4) "Debling neither teaches nor suggests that "at least part of the web content", which is stored in the "non-volatile storages", being "served to the digital appliance"." (page 13, paragraph 4, Response.)

(5) "the arguments given above with respect to claim 1 correspondingly apply to claim 20" (page 13, paragraph 5, Response.)

(6) "claim 17 recites that non-volatile storage of a web server emulation device includes a hidden area used to store web content and, further, that one or more of the "agents" control access to this hidden area. These elements are not part of the "Applicants' admission"; nor, it is believed, are they found in the prior art. Further, Debling neither teaches nor suggests a hidden area to the non-volatile memory". (page 13, paragraph 7, Response.)

***Response to Arguments***

**11.** Applicants' arguments have been fully considered.

**11-1.** Applicants' arguments (1)-(5) are not persuasive. Debling discloses in FIG. 3 that a target chip 100 is connected via a communication device 700 to a host computer system 800. The Examiner considers the target chip 100 together with the connected communication device 700 as the claimed web server emulation device. Applicants assert in the specification at page 1, lines 15-17, "A Web server is a program that serves web pages as well as other types of content to users running client software known as web browsers." Therefore, when running an embedded web-server process on the on-chip processing circuitry, the host (client) is running web browsers and the information processed by the embedded web server process is web content, which includes the collected information about operation of the processor stored in the target or on-chip memory circuitry.

**11-2.** Applicants' argument (6) is not persuasive. In response to Applicants' argument against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Because in the real world a hidden area is used to store web content with access control, it would have been obvious to one of ordinary skill in the art to also implement it for a device to emulate the real world scenario.

***Conclusion***

12. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The Examiner can normally be reached on 9:00 - 17:30.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kamini S. Shah can be reached on (571) 272-2279. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2128

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Heng-der Day  
May 29, 2007

HD

  
KAMINI SHAH  
SUPERVISORY PATENT EXAMINER